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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/534,262 03/24/00 HATA

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QM12/0816

EXAMINER

CHANG, R

ART. UNIT	PAPER NUMBER
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3729

DATE MAILED:

08/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/534,262

Applicant(s)

Hata et al

Examiner

Rick Kiltae Chang

Group Art Unit

3729



☒ Responsive to communication(s) filed on Mar 24, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), ~~or thirty days~~, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 15-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 15-17 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/740,992.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Objections

1. Claims 16-17, line 1, are objected to because of the following informalities: amend "A component" to --The component--. Appropriate correction is required.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a stick-shaped component supply means, cassettes, reels, a pipe member, bulk components" limitations must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are numerous phrases and clauses in the claims that are vague, indefinite, and/or awkwardly and confusingly worded, and therefore, are not fully understood. The following are examples:

Claim 15, line 6: the limitation "depthwise sides" renders the claim vague and indefinite. Where is this limitation in respect to the support frames and the component supply tables? What does it mean by "depthwise"?

Claim 15, line 10: amend "the plural components" to --said plurality of components--.

Claim 16: "a stick-shaped" and "a tray-shaped" limitations render the claim vague and indefinite. It is unclear whether the limitations are actually shaped like stick or tray or not. The claim fails to positively recite the structural description of the limitations.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US 5,323,528) in view of Asai et al (US 5,711,065), and further in view of Mori et al (US 5,456,001).

Baker discloses a plurality of component supply tables (27) accommodating a plurality of components arranged opposite sides of a board mounting position (Fig. 5) and substantially all the claimed limitations, except for the component supply tables are moved by casters, a stick-shaped component supply means at which components stored in a pipe member, and bulk components. It would have been obvious to provide bulk components to the Baker's apparatus to mount various types of components on the printed circuit boards.

Asai discloses the component supply tables are moved by casters (296) thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

Mori discloses a stick-shaped component supply means (where 57 lies) at which components stored in a pipe member (15 and 16) thereby supplying disoriented components one by one to the supply position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing casters to the component supply tables as taught by Asai thereby readily exchanging one tray component supply table to another tray component supply table to replenish depleted components.

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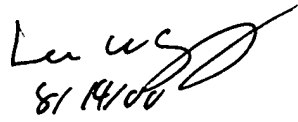
Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baker by providing a stick-shaped component supply means at which components stored in a pipe member as taught by Mori thereby supplying disoriented components one by one to the supply position.

Conclusion

8. Examiner requests the applicants to provide examiner-friendly written communication by providing support in the specification for any changes to the claims.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Chang whose telephone number is (703) 308-4784. The examiner can normally be reached on Monday thru Friday from 5:00 AM to 1:30 PM.

rc

August 14, 2000


8/14/00
LEE YOUNG
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TECHNOLOGY CENTER 3700